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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,657	08/31/2001	Xiao-fan Feng	KDO:190230-11	1786

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EXAMINER	
LEE, CHEUKFAN	
ART UNIT	**PAPER NUMBER**
2622	

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/944,657	XIAO-FAN FENG	
	Examiner	Art Unit	
	Cheukfan Lee	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 August 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-13 and 22-31* is/are allowed.

6)☒ Claim(s) *14-16, 19, and 32* is/are rejected.

7)☒ Claim(s) *17,18,20 and 21* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 August 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8/31/01;6/2/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Claims 1-32 are pending. Claims 1, 14, 19, 22, and 32 are independent.

2. The drawings are objected to because of the following:

Figs. 1-6 should be labeled with – PRIOR ART – as explained on page 1, line 30, page 2, line 12, page 2, line 22, page 3, lines 3-4, page 4, line 13, and page 5, line 21, respectively.

3. Claim 18 is objected to because of the following:

The symbols in the expression should be defined using the format "where .....".

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue et al. (U.S. Patent No. 4,714,940).

Regarding claim 14, Inoue et al. discloses a document scanning system (Figs. 9 and 10) having an inherent scanner lamp and an inherent scanner sensor, a document-backing (2, 3) having a surface (30). The surface (30) comprises at least one specularly reflective surface (30a), the at least one surface (30a) at least partially covering the document-backing surface (30), the at least one surface (30a) oriented to

reflect light from the scanner lamp to the scanner sensor (Figs. 9 and 10, col. 14, line 42 – col. 16, line 5). Though the part (3) is a display, it is a part of the document backing (2 and 3 in Fig. 9). Therefore, the document-backing surface (30) reads on the claimed document-backing surface.

Regarding claim 15, the surface (30) has a plurality of specularly reflective surfaces (30a in Fig. 10).

Regarding claim 16, it is inherent that each of the plurality of specularly reflective surfaces (30a) has a coefficient of reflectivity of at least 5 percent since the surfaces (30a) are employed for increasing the amount of light to be sufficient for a good quality image (col. 15, lines 25-42).

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 19 and 32 rejected under 35 U.S.C. 102(e) as being anticipated by Dawe (U.S. Patent No. 6,219,158).

Regarding claim 19, Dawe discloses a document scanner having a scanner lamp (106), a scanner sensor (118), and a scanner cover (lid 104) having a document-

backing surface (reflective background surface 114) (col. 2, lines 7-25). The reflective surface (114) is dynamically variable, it can be controlled to have different colors and different regions. In the case that the entire reflective surface (114) needs to be black, the entire surface is all black (col. 3, line 66 – col. 4, line 7), meaning that all regions of the reflective surface are black.

It is an inherent property of the two regions or surfaces of the reflective background surface (114) that these black surfaces are both non-reflective and light-absorbing.

Regarding claim 32, the claimed method is disclosed by Dawe. First, with respect to the claimed steps (e) and (f), the reflective surface (114) is dynamically variable, and it can be controlled to have difference colors and different regions (col. 3, line 66 – col. 4, line 7). In the case that one region of the surface is of a light color such as white, and another region of the surface is black, which black and white are two of the colors of choices in Dawe, the light region reflects light and the black region absorbs light. Since the surface (114) is an LCD (col. 3, lines 43-48), the reflecting of light by the light color region of the surface (of 114) is specularly done. Therefore, Dawe discloses the claimed method steps. A scanner cover (lid 104) is provided, the lid having a document-backing surface (surface of 114). A document (100) is provided for scanning. When the cover (lid 104) is closed, the document-backing surface (surface of 114) is placed against the document (100). Light is shined on the document (100) and the backing surface (of 114) during scanning. A portion of the light is specularly reflected from the light region of the LCD surface (114) as discussed above onto a scanner lens

(col. 2, lines 27-30). A portion of the light is absorbed by the black region of the surface (114) discussed above.

8. Claims 17, 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 1-13 and 22-31 are allowed.

10. The following is an examiner's statement of reasons for allowance:

Claim 17 would be allowable over Inoue et al. (U.S. Patent No. 4,714,940). The claim recites "wherein each of said plurality of specularly reflective surfaces has a coefficient of reflectivity, each said coefficient of reflectivity being lest than 100 percent. In Inoue et al., each of the specularly reflective surfaces (30a in Fig. 10) is employed for increasing the overall light amount for scanning, and Inoue et al. makes sure that the direction of light reflected is the desired direction by changing an angle theta (θ) between a slant surface (30a) of the reflective plate (30) (backing) and the horizontal surface. Clearly, the brighter the reflected light, the more sufficient the light amount for scanning, meaning that the coefficient of reflectivity of each of the surfaces (30a) is intended to be closed to 100 percent, if not at 100 percent.

Claim 20 would be allowable because Dawe does not disclose covering the non-reflective surface (black surface) with a specularly reflective surface as claimed.

Claim 21 depends on claim 20.

Independent claims1 and its dependent claims 2-13 are allowable over the prior art of record, including the closest prior art references Inoue et al. and Dawe, because the prior art does not teach a document-backing surface having a combination of the claimed first non-reflective surface, second non-reflective surface, and a specularly reflective surface partially covering the second non-reflective surface.

Independent claims 22 and its dependent claims 23-31 are allowable over the prior art of record, including Inoue et al. Though Inoue et al. teaches a document-backing surface (30 in Fig. 10) having saw-teeth (30a), and that the angle between the tooth surface (30a) and the horizontal surface can be changed to orient the reflected light by the surface (30a) into a desired direction, Inoue et al. does not teach that a first tooth surface and a second tooth surface of the tooth of the backing surface are perpendicular to the cover geometric plane defined by the claimed longitudinal axis and latitudinal axis. This feature of the claimed backing surface in combination with other limitations of claim 22 is not taught by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Salgado (U.S. Patent No. 6,587,233) discloses a document scanner having removable bicolored platen covers.

Seachman et al. (U.S. Patent No. 5,790,211) discloses a document scanner having a platen cover with electrically switchable reflectance modes.

Ford et al. (U.S. Patent No. 6,862,117) discloses a method and an apparatus for reducing the effect of bleed-through on captured images.

Sharma (U.S. Patent No. 6,288,798) discloses a show-through compensation apparatus and method for a document scanner.

Buchar et al. (U.S. Patent No. 6,744,536) discloses a document scanner having replaceable backing and automatic selection of registration parameters.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (703) 305-4867. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cheukfan Lee
March 1, 2005

Cheukfan Lee